

WHAT IS CLAIMED:

1. A powertrain of a vehicle having wheels, the powertrain comprising

- a thermal engine having an output shaft, which when required can be mechanically connected to at least one of the wheels for driving the at least one of the wheels,

- an energy storage,

- an electric motor, which is mechanically connected to the thermal engine or to the at least one wheel and which is electrically connected to the energy storage and is supplied with electric power from the energy storage for supplying or receiving mechanical power or torque when required,

wherein at least part of filtered air from an air filter of the thermal engine is made to pass in such a way that at least part of the electric motor will obtain cooling from the filtered air.

2. A powertrain according to claim 1, wherein at least part of the filter air is made to pass through an airgap of the electric motor.

3. A powertrain according to any of claims 1-2, wherein at least part of the air is made to pass along permanent magnets of the electric motor.

4. A powertrain according to claims 1-2, wherein at least part of the air is made to pass between windings of the electric motor.

5. In a vehicle having wheels and a powertrain including a thermal engine and a electric motor for selectively driving the vehicle, the electric motor being equipped for regenerative braking, a method of cooling the electric motor comprising:

- passing air for supply to the thermal engine through an air filter to produce filtered air;
- providing at least part of filtered air from an air filter of the thermal engine to the electric motor to provide cooling thereof.